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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,407	07/29/2003	Kiyoshi Kusama	00862.002959.1	6364

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EXAMINER

HARPER, LEON JONATHAN

ART UNIT	PAPER NUMBER
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2166

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/628,407

Applicant(s)

KUSAMA ET AL.

Examiner

Leon J. Harper

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-19, 41-45, 57-65 and 68 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-19, 41-45, 57-65 and 68 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 7/29/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/29/07 has been entered. Claims 11-12,15-16,41-42,57-58,62,64,68,71 have been amended, claims 14 and 71 have been canceled. Accordingly claims 11-19,41-45,57-65,68 are pending in this office action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 11-16,18-19, 41-45,57-59,62-65,68 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6075905 (hereinafter Herman).

As for claim 11 Herman discloses: holding first information including a color information of each of a plurality of material images by the image processing apparatus and the first information corresponds to each of the plurality of material images and has an amount of information less than that of each of the plurality of material images (See column 14 lines 50-55) determining selected material images and their positions such that the selected material images have color information similar to the color information of respective blocks divided from the original image by the image processing apparatus (See column 8 lines 33-38, and column 14 lines 53-60); storing the plurality of material images in the image storage apparatus, and outputting the selected material images determined in said determining step out of the plurality of material images stored in the storage apparatus according to the position determined in said determining step (See column 6 lines 36-39).

As for claim 12 the rejection of claim 11 is incorporated, and further Herman discloses said determining includes determining the selected material images which correspond respectively to each block created by dividing the original image for positioning of the selected material images (See column 5 lines 63-66 "Averaging technique), and said outputting step includes forming a mosaic image by combining the selected material images which correspond respectively to each block (See column 24 lines 10-15 note: "this deals with the frame to mosaic computations").

As for claim 13 the rejection of claim 11 is incorporated, and further Herman discloses: the color information is a scale-down image of each of the plurality of material images (See column 5 line 66- column 6 line 3).

As for claim 15 Herman discloses: holding information including color information of each of the plurality of material images (See column 14 lines 50-55) determining selected material images such that the selected material images have color information similar to the color information of respective blocks divided from the original image (See column 8 lines 33-38, and column 14 lines 53-60); and outputting information indicating the selected material images determined in said determining step to said the image storage apparatus (See column 6 lines 36-39).

As for claim 16 the rejection of claim 15 is incorporated and further Herman discloses: wherein said output step includes combining selected material images to form a mosaic image (See column 6 lines 36-39).

As for claim 18 the rejection of claim 15 is incorporated, and further Herman discloses: wherein the plurality of material images are divided into a plurality of groups and held, and said method further comprises a step of specifying any of the plurality of groups (See column 9 lines 21-29 "note each collection of sub-mosaics is a group" The calculations follow and the when calculations E.sub.mn. comes out to be zero you have a new group).

As for claim 19 the rejection of claim 15 is incorporated, and further Herman discloses: further comprising a step of receiving the mosaic image formed in the image storage apparatus (See column 6 lines 29-34).

As for claim 41 Herman discloses: holding means for holding information including color information of each of the plurality of material images (See column 14 lines 50-55); determination means for determining selected material images such that the selected material images have color information similar to the color information of respective blocks divided from the original image (See column 8 lines 33-38, and column 14 lines 53-60); and output means for outputting information indicating the determined selected material images determined by said determination means to the storage apparatus (See column 6 lines 36-39).

As for claim 42 the rejection of claim 41 is incorporated, and further Herman discloses: wherein said output means combines the selected material images to form a mosaic image (See column 6 lines 36-39).

As for claim 43 the rejection of claim 41 is incorporated, and further Burt discloses: a means for receiving information including a characteristic of each of the plurality of material images from the image storage apparatus (See column 5 lines 13-21).

As for claim 44 the rejection of claim 41 is incorporated, and further Herman discloses: wherein the plurality of material images are divided into a plurality of groups and held and said apparatus further comprising a means for specifying any of the plurality of groups. (See column 9 lines 21-29 "note each collection of sub-mosaics is a group" The calculations follow and the when calculations E.sub.mn. comes out to be zero you have a new group).

As for claim 45 the rejection of claim 41 is incorporated, and further Herman discloses: further comprising a means for receiving the mosaic image formed in said the storage apparatus (See column 6 lines 29-34).

As for claim 57 Herman discloses: means for holding first information including color information of each of a plurality of material images, wherein the first information corresponds to each of the plurality of material images and has an amount of information less than that of each of the plurality of material images (See column 14 lines 50-55); and determining means for determining selected material images and their positions such that the selected martial images have color information similar to the color information of respective blocks divided from the original image (See column 8 lines 33-38 and column 14 lines 53-60); image storage apparatus comprising' means for storing the plurality of material images (See column 4 lines 12-16 note "all of which have memory constituting the means") and means for outputting the selected material images

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determined by said determination means out of the plurality of material images stored in said image storage apparatus according to the position determined by said determination means (See column 6 lines 36-39 and column 10 lines 26-36).

As for claim 58 the rejection of claim 57 is incorporated, and further Herman discloses: wherein said determination means determines the selected material images each of which correspond to each block created by dividing the original image for positioning of the material image (See column 5 lines 63-66 "Averaging technique"), and said output means forms a mosaic image by combining the selected material images which correspond respectively to each block of the original image. (See column 24 lines 10-15 note: "this deals with the frame to mosaic computations").

As for claim 59 the rejection of claim 57 is incorporated, and further Herman discloses: wherein the color information corresponding to the material images is obtained from a plurality of scale-down image or a plurality of image characteristic parameters corresponding to the plurality of material image (See column 5 line 66-column 6 line 3).

As for claim 62 the rejection of claim 58 is incorporated, and further Herman discloses: wherein said storage means stores the plurality of material images by dividing the plurality of material images into a plurality of groups, and said determination means determines the selected material images and their positions according to the first

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information corresponding to a plurality of material images contained in a selected group. (See column 9 lines 21-29 “note each collection of sub-mosaics is a group” The calculations follow and the when calculations E.sub.mn. comes out to be zero you have a new group).

As for claim 63 the rejection of claim 58 is incorporated, and further Herman discloses: wherein said receiving means further receives a mosaic image generated by said output means (See column 6 lines 29-34).

As for claim 64 the rejection of claim 58 is incorporated, and further Herman discloses: wherein said image processing apparatus receives the material image determined by said determination means from said image storage means by said receiving means and positions the material image received by said receiving means according to the position determined by said determination means to form a mosaic image (See column 9 lines 35-46).

As for claim 65, the rejection of claim 57 is incorporated, and further discloses: wherein a plurality of said image processing means are provided and said image storage means can be shared between said plurality of image processing means (See column 13 lines 30-40 noting that each level of the pyramid resides in a different memory location).

Claim 68 is rejected for the same reasons as set forth in the rejection of claim 15.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Herman as applied to claim 15 above, and further in view of US 5325449 (hereinafter Burt).

As for claim 17 the rejection of claim 15 is incorporated, and further Herman differs from the claimed invention in that a step of receiving information including a characteristic of each of the plurality of material images from said the image storage-apparatus is not disclosed. Burt however, does disclose: further comprising a step of receiving information including a characteristic of each of the plurality of material images from said the image storage-apparatus. (See column 5 lines 13-17). It would have been

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obvious to an artisan of ordinary skill in the pertinent art to have incorporated the teaching of Burt into the system of Herman. The modification would have been obvious because the two references are concerned with the solution to problem image construction, there is an implicit motivation to combine these references. In other words, the ordinary skilled artisan, during his/her quest for a solution to the cited problem, would look to the cited references at the time the invention was made. Consequently, the ordinary skilled artisan would have been motivated to combine the cited references since Burt's teaching would enable the Herman system to account for a plurality of image characteristics.

Claims 60-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herman as applied to claim 15 above, and further in view of US 5325449 (hereinafter Burt).

As for claim 60 the rejection of claim 57 is incorporated, and further Herman differs from the claimed invention in that wherein said image processing apparatus further comprises receiving means for receiving the first information corresponding to the plurality of material images from said image storage apparatus is not disclosed. Burt however, does disclose: wherein said image processing apparatus further comprises receiving means for receiving the first information corresponding to the plurality of material images from said image storage apparatus (See column 5 lines 13-21). It would have been obvious to an artisan of ordinary skill in the pertinent art to have

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incorporated the teaching of Burt into the system of Herman. The modification would have been obvious because the two references are concerned with the solution to problem image construction; therefore, there is an implicit motivation to combine these references. In other words, the ordinary skilled artisan, during his/her quest for a solution to the cited problem, would look to the cited references at the time the invention was made. Consequently, the ordinary skilled artisan would have been motivated to combine the cited references since Burt's teaching would enable the Herman system to account for a plurality of image characteristics.

As for claim 61 the rejection of claim 57 is incorporated, and further Herman differs from the claimed invention in that wherein said receiving means receives the first information corresponding to said the material images during activation of said image processing system is not disclosed. Burt however, does disclose: wherein said receiving means receives the first information corresponding to said the material images during activation of said image processing system (See column 5 lines 40-44 note: This is step 1). It would have been obvious to an artisan of ordinary skill in the pertinent art to have incorporated the teaching of Burt into the system of Herman. The modification would have been obvious because the two references are concerned with the solution to problem image construction; therefore, there is an implicit motivation to combine these references. In other words, the ordinary skilled artisan, during his/her quest for a solution to the cited problem, would look to the cited references at the time the invention

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was made. Consequently, the ordinary skilled artisan would have been motivated to combine the cited references since Burt's teaching would enable the Herman system to account for a plurality of image characteristics.

Response to Arguments

Applicant's arguments filed 1/29/07 have been fully considered but they are not persuasive.

Applicant argues:

Applicant essentially argues that the cited Herman patent does not teach the added limitation of "color information similar to the color information of respective blocks divided from the original images".

Examiner responds:

Examiner is not persuaded. Examiner now cites additional sections of Herman that now explicitly disclose using color information to handle mosaic image generation.


Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leon J. Harper whose telephone number is 571-272-0759. The examiner can normally be reached on 7:30AM - 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LJH
Leon J. Harper
April 4, 2007


Mohammad Ali,
Primary Examiner